

Figure 1 (Prior Art)

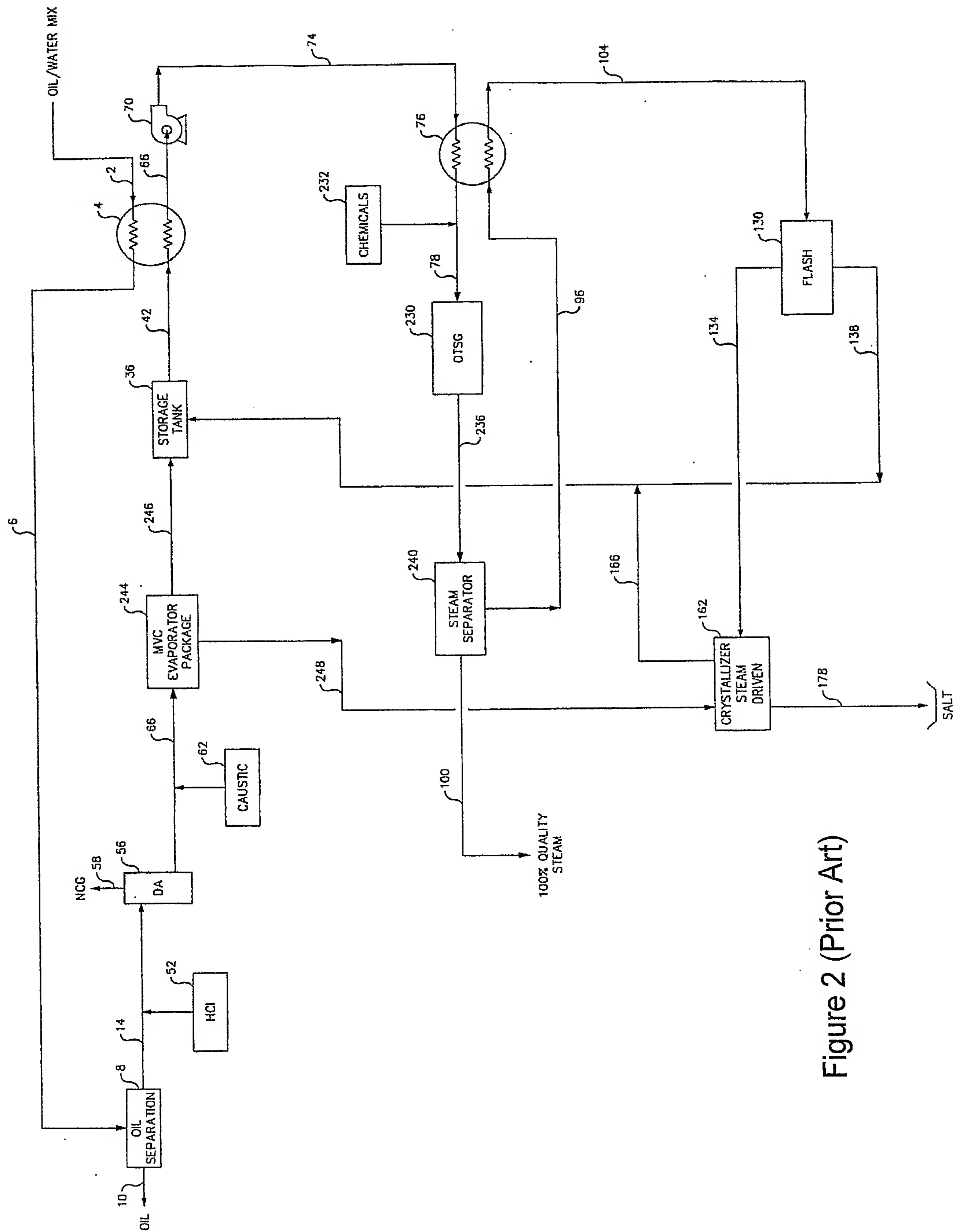


Figure 2 (Prior Art)

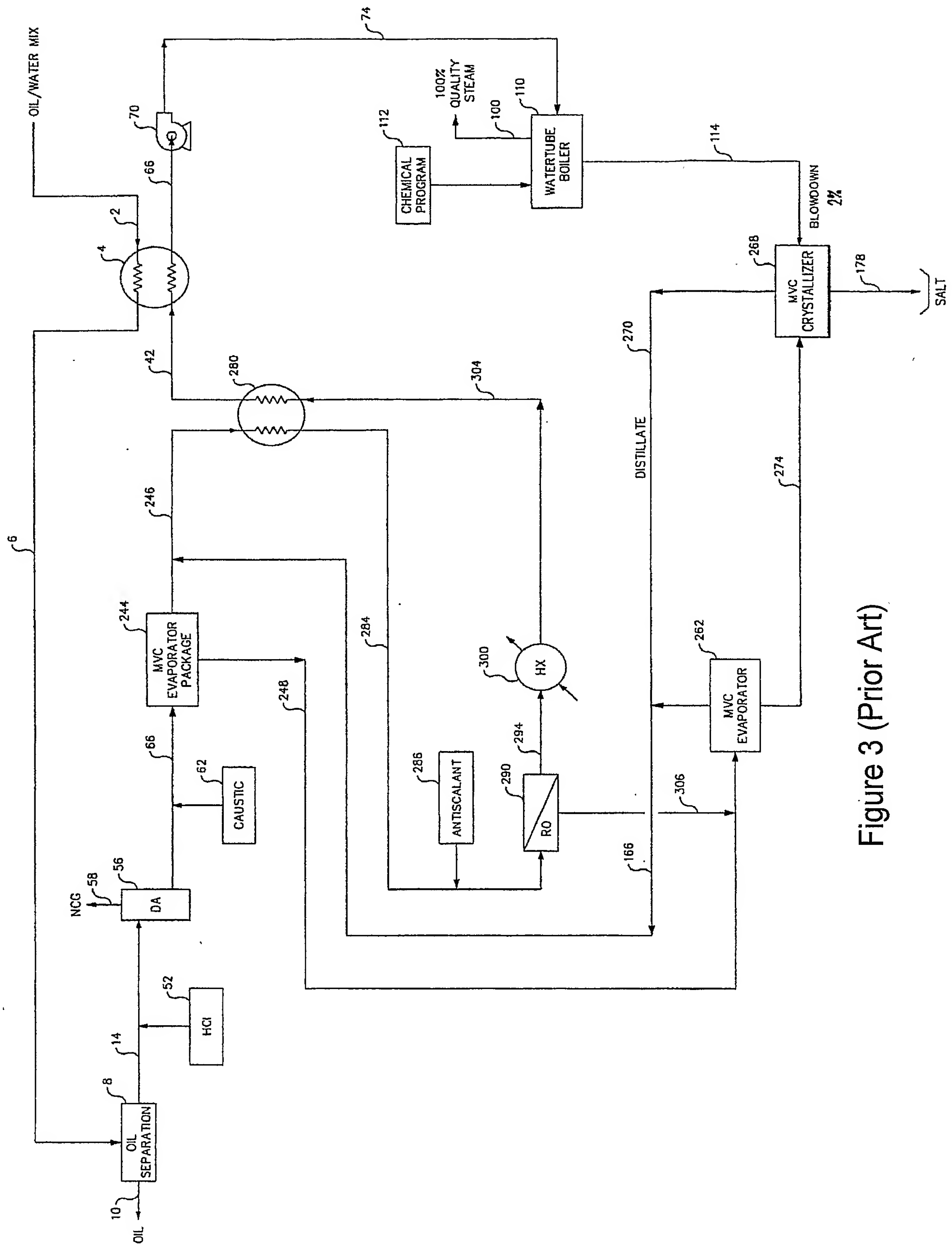


Figure 3 (Prior Art)

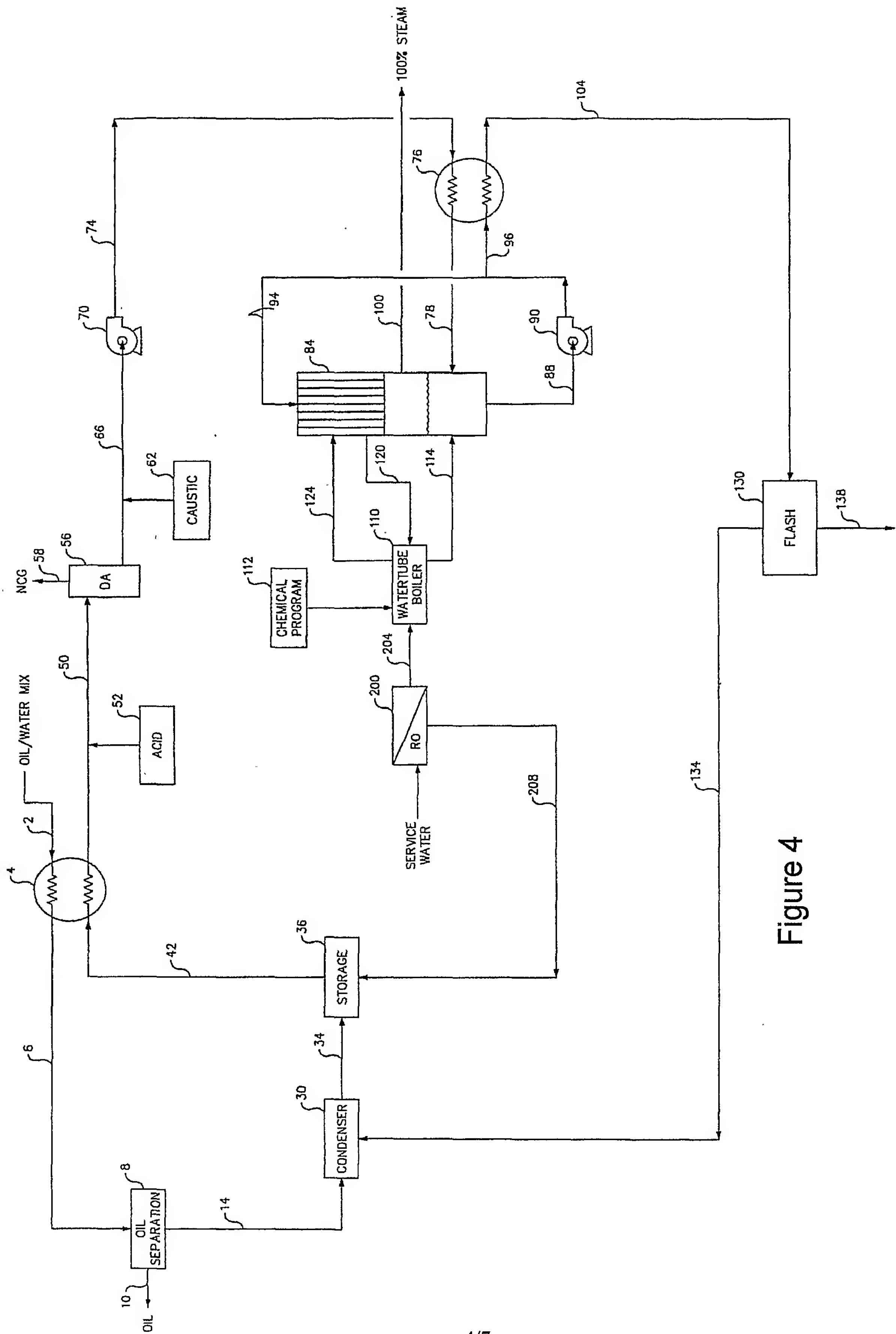


Figure 4

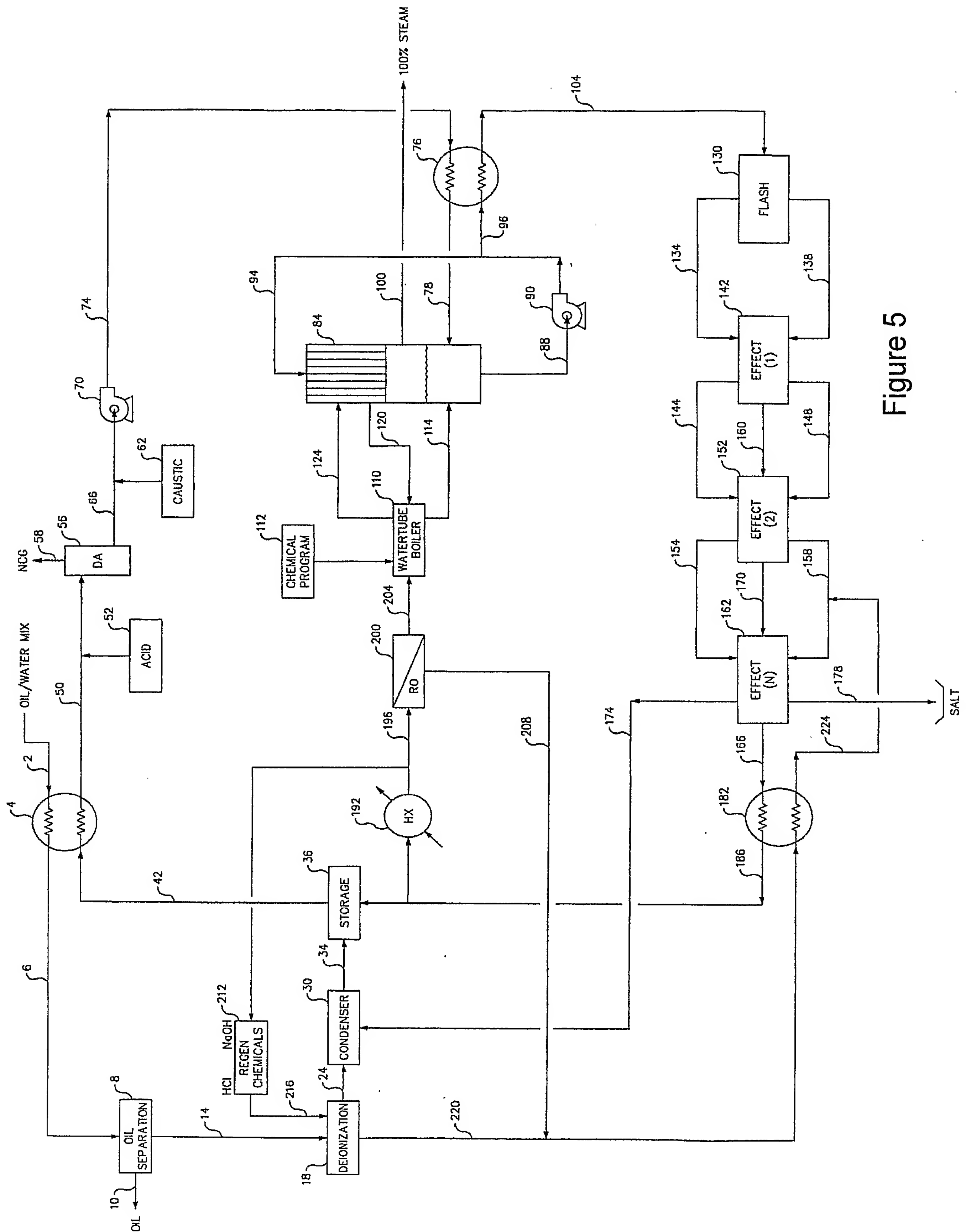


Figure 5

Figure 6

**TYPICAL ONCE THROUGH STEAM GENERATOR
FEEDWATER REQUIREMENTS**

Chlorides	<1000 mg/l
Hardness (as CaCO ₃)	<0.5 mg/l normal <1.0 mg/l maximum
Oil and Grease	<0.5 mg/l normal <1.0 mg/l maximum
TDS	<2500 mg/l
Silica (as SiO ₂)	<80 mg/l
TSS	<1.0 mg/l
Iron (as Fe)	<0.1 mg/l
pH	9.0 – 10.0
H ₂ S	<0.1 mg/l
Oxygen	Zero

Figure 7

**TYPICAL 1000 PSIG WATERTUBE BOILER
ASME FEED and BOILER WATER REQUIREMENTS**

Feedwater	
Hardness (as CaCO ₃)	<0.05 mg/l
Non-Volatile TOC (as C)	<0.20 mg/l
Oil and Grease	<0.20 mg/l
Copper (as Cu)	<0.01 mg/l
pH	8.8 – 9.6
Boiler Water	
Silica (as SiO ₂)	<6 mg/l

Ionization of Silica

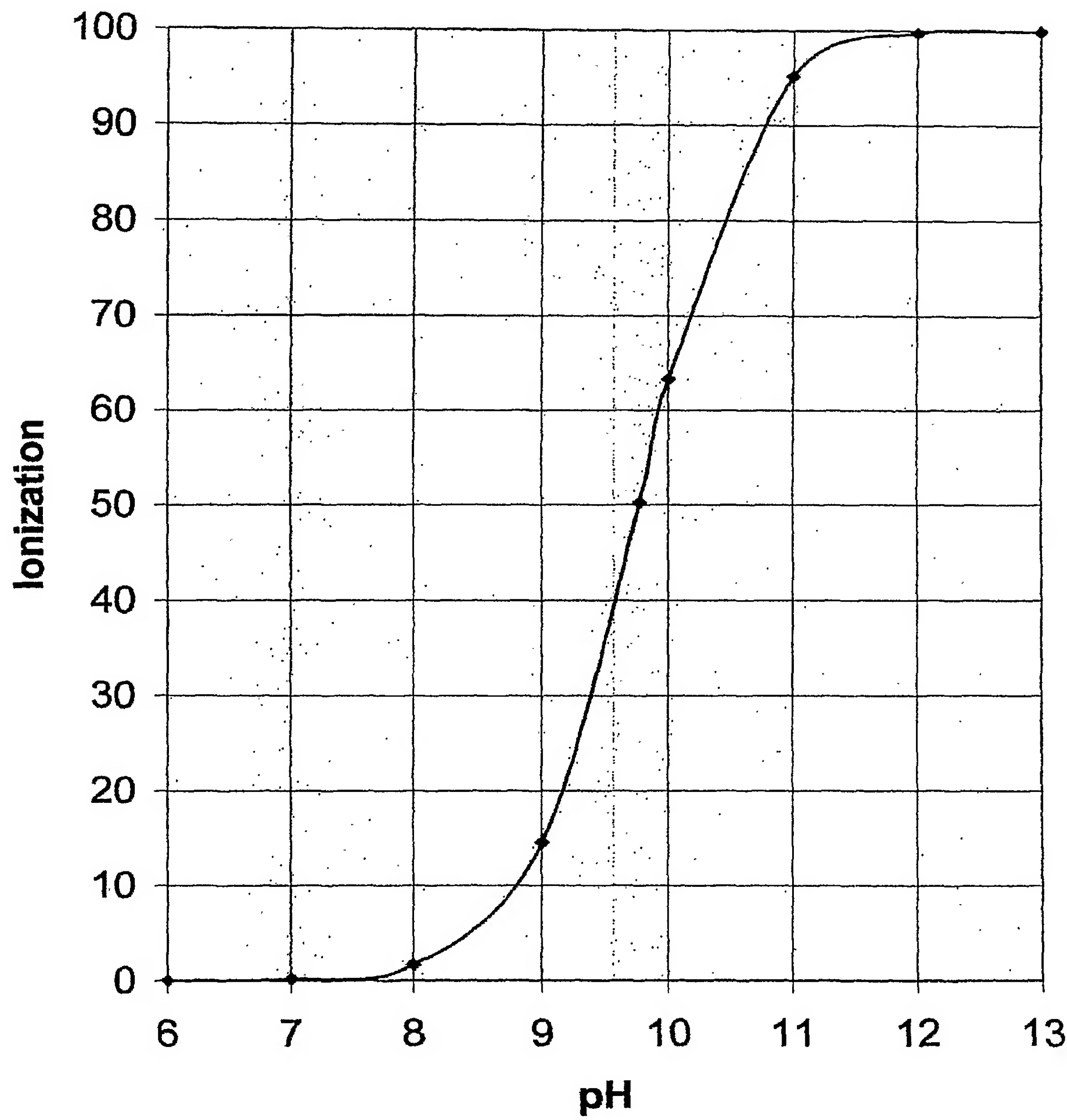


Figure 8